

## **WHAT IS CLAIMED IS**

1. A rigid insulation product for use in wood frame construction, comprising a single unitary insulating member, dimensioned to be mounted lengthwise on a joist header and including a plurality of slots extending width-wise across the member, each slot being dimensioned to receive an end of a floor joist.

2. The rigid insulation product of claim 1 wherein the slots are disposed at spaced intervals, the spacing of the slots corresponding to predetermined spacing of the floor joists in the wood frame construction.

3. The rigid insulation product of claim 1 wherein the member includes a wall, at the base of each slot, of sufficient thickness to provide a thermal break between the floor joist end and the joist header when the product is in use.

4. The rigid insulation product of claim 1 wherein the width of the insulating member is substantially equal to the width of the joist header on which the insulating member will be mounted.

5. The rigid insulation product of claim 1 wherein the slots extend across the entire width of the insulating member.

6. The rigid insulation product of claim 1 further comprising the joist header, pre-attached to the insulating member.

7. The rigid insulation product of claim 1 wherein the insulating member comprises an insulating material selected from the group consisting of cellular polystyrene, polyurethane and isocyanurate, other cellular plastics, cellulose, and mixtures thereof.

8. The rigid insulation product of claim 1 wherein at least some of the slots are dimensioned to receive an end of a wood I-beam.

9. The rigid insulation product of claim 2 wherein the slots are spaced at intervals of about 16 inches.

10. The rigid insulation product of claim 2 wherein the slots are spaced at intervals of about 24 inches.

11. The rigid insulation product of claim 3 wherein the wall has a thickness of at least 0.375 inch.

12. The rigid insulation product of claim 1 wherein the insulating member has a thickness, in regions between the slots, of from about 1.0 to 3.5 inches.

13. A rigid insulation product for use in wood frame construction, comprising:  
a single unitary insulating member, including a plurality of slots extending width-wise across the member, each slot being dimensioned to receive an end of a floor joist; and  
a wood member, dimensioned to function as a joist header in the wood frame construction, mounted on the insulating member.

14. The rigid insulation product of claim 13 wherein the slots are disposed at spaced intervals, the spacing of the slots corresponding to predetermined spacing of the floor joists in the wood frame construction.

15. The rigid insulation product of claim 13 wherein the insulating member includes a wall, at the base of each slot, of sufficient thickness to provide a thermal break between the floor joist end and the joist header when the product is in use.

16. The rigid insulation product of claim 13 wherein the width of the insulating member is substantially equal to the width of the wood member.

17. The rigid insulation product of claim 13 wherein the slots extend across the entire width of the insulating member.

18. The rigid insulation product of claim 13 wherein the insulating member comprises an insulating material selected from the group consisting of cellular polystyrene, polyurethane and isocyanurate, other cellular plastics, cellulose, and mixtures thereof.

19. The rigid insulation product of claim 13 wherein at least some of the slots are dimensioned to receive an end of a wood I-beam.

20. The rigid insulation product of claim 14 wherein the slots are spaced at intervals of about 16 inches.

21. The rigid insulation product of claim 14 wherein the slots are spaced at intervals of about 24 inches.

22. The rigid insulation product of claim 15 wherein the wall has a thickness of at least 0.375 inch.

23. The rigid insulation product of claim 13 wherein the insulating member has a thickness, in regions between the slots, of from about 1.0 to 3.5 inches.

24. A method of constructing a floor of a structure, comprising:  
mounting an insulating member on a joist header, the insulating member including a plurality of slots extending width-wise across the insulating member, each slot being dimensioned to receive an end of a floor joist;  
inserting the ends of a plurality of floor joists in the slots; and  
securing the floor joists to the joist header.

25. The method of claim 24 wherein the inserting and securing steps are performed at a construction site, and the mounting step is performed at a site remote from the construction site.

26. The method of claim 25 wherein the insulating member is formed in place on the joist header.

27. The method of claim 26 wherein the insulating member is formed on the joist header using a process selected from extrusion and molding.

28. The method of claim 25 wherein the insulating member is adhesively bonded to the joist header.

29. The method of claim 24 wherein the inserting and securing steps are performed at a construction site, and the mounting step is also performed at the construction site.

30. The method of claim 24 wherein the slots are of sufficient depth to hold the ends of the floor joists in place during the securing step, allowing the insulating member to be used as a template.

31. The method of claim 24 wherein at least some of the slots are dimensioned to receive an end of a joist having an I or C shaped cross-section.

32. A rigid insulation product comprising a single unitary insulating member, dimensioned to be mounted lengthwise on a joist header and including a plurality of slots extending width-wise across the member, each slot being dimensioned to receive an end of a floor joist having a C or I shaped cross-section.

33. The rigid insulation product of claim 32 further comprising the joist header, pre-attached to the insulating member.